## **Bishops IT support infrastructure and Policy**

The Laptop committee has been questioning the upfront support cost and having taken the doubts and questions from the parents under consideration, we thought it wise to quantify the discussion and flesh out many of the issues that have come up.

There are 2 components to the upfront IT costs that each parent has to make, excluding the outright purchase of a laptop. These are a) the annual Microsoft office and Client Access license, virus protection and some other subject specific software applications, b) the once off technology fee (which includes general IT support and the Helpdesk fee)

## 1) Applications:

The +/- R430 per year is for MS Office Professional which is most likely Office 365 Premium 1year, Special price right now +/-R800.00 pa if you want to buy it yourself. In addition, 1 Year license F-Secure, Normal price +/-R430 pa. We realise that there are free security applications available such as MS essential, but it's .. well... free. You get what you pay for.

While there are specials you can make use of to get the Microsoft Office Professional, the pricing includes various Client Access license as well as many other licenses. You will not need to pay for anything more while using the myriad of applications at Bishops. The version of Microsoft Office Premium is the Latest version and includes all the components and will be kept up to date as per the processes below.

The school is also offering Office 365 in addition to the school license agreement.

## 2) Upfront IT Support fee

For +/- R 5000 once off your son will receive 5 years ICT services which includes but is not necessarily limited to:

- 2.1) Network and connectivity support to servers, printers, network, and Internet
- 2.2) Windows Active directory, Profile, Policies and Images, which includes Web access

(Intra and Inter), Exchange and access policies (it works from your smartphone, someone has to maintain it and manage the accounts and lost passwords). Also, there are the collections of Access Licenses for Exchange, Windows Directory Services and any Databases that are running, as well as the Webservers and Services hosted on the Intra and Extranet.

2.3) Microsoft Office application support: This application is a beast to support and difficult to manage properly for all users. Underlying this are policies which have to be actively managed and backed up and the application will only run smoothly if everything is correctly setup and maintained. Windows and Office release WEEKLY updates, sometimes even daily and these MUST be maintained properly. However the Office application is tricky to use properly and often users need help with it and not just lost

- projects ("laptop ate my homework"), but also things like fonts, layouts and formulae. General application support is included.
- 2.4) Active security, passwords, profiles and access are managed and backed up. This includes internal and internal access and access to applications, mail and protected data, but also includes the access on the laptop itself. Forgotten passwords are common after a holiday in Mauritius over Christmas. Virus updates and malicious software treatment as well as management of internet access are included. The recent spate of vulnerabilities and the consequent attacks on major Service providers just shows how vulnerable we really are and how actively the user base at Bishops needs to be supported. Also, remember that all boys will connect their devices to other networks, such as home, public Wifi's and of course Free Networks like at MacDonald's or Mug and Bean or even the airport. Many boys will have mobile sim cards as well to provide GSM network access, all of which has to run seamlessly with Bishops Network access policy.
- 2.5) Web Access and the management of security and access is provided and managed, which includes the parent network and of course all those papers the boys left at school and are so upset about when you find them on the extranet for them.
- 2.6) Hardware support, managing the Warranties and dealing with post warranty damage. If the item of the laptop is broken due to user negligence, a spare is organised and replaced, where the user pays for the component, but not for the labour. If the part replacement is a warranty claim, there is no charge to the user and the process is entirely managed by the support unit. With Accidental cover and even with out of warranty support, the management of the warranty, the organisation and the installation of the spare is handled by the Support team and not the parent and with the upfront payment, there is no need to contact the parent other than for the replacement cost of the actual part, if it is not covered by any of the above warranties.
- 2.7) Driver support, a huge amount of things go on underneath the hood of a computer, which is not visible. Drivers are the key to a good operational device, which is typically quite an abused tool in the hands of teenagers. The fact is that kids WILL install their own stuff often from dubious sources, which will periodically mess up the underlying layer of software, which will be sorted out for the student. In the worst case, the laptop is returned to its previous backed up Image state.
- 2.8) Spares. Common things do need to be available and are on hand, which often cause serious headache to any student, such as power cables and AC adapters. In the worst case a loan laptop is available. The upfront payment of each Student provides a pool of spare laptops which are loaned out the students in the case of a failed or broken laptop (warranty claim or not). The pool of Laptops must be maintained with all the latest drivers and have all the correct applications no matter what class the student is in. This is maintained by the support unit as well as the logistics behind the loaning out of it in the first place.
- 2.9) Hardcopies; there are several printer stations for pupils. Basically the school uses a system where you print to a network 'queue', go to the closest station and release your prints. The first R100 is free and thereafter the boys can buy additional credit. To date that R100 (23c per copy) per boy has proved sufficient enough to print the basics and maintain our attitudes towards greening.

In summary and as an answer to points brought up by various parties, the infrastructure is impressive and vast, with a large amount of access points, routers and networking equipment as well as servers and mail gateways and uplinks. There is NO additional charge of data usage to the student and the access provided is sufficient, if not in excess of that offered at home or elsewhere. There is no charge over and above the school fees and the above costs for the use of this infrastructure.

Financially, +/-R 5000 for 5 years of support works out to around R 1000 odd per year. The school needs to manage and maintain a support team of AT LEAST 2 people and a logistical and management overhead, who have to be around till late at night and before school and of course at ALL events where IT is required. Also, the loan units are supplied as are many spares and the whole logistical process behind it is managed down to who has what loan cable. This means that an outside company is offering this whole support to roughly 2000 users for around R 400 000 per year.

An argument could be made to have this NOT outsourced, but managed in-house with Bishops staff. The simple answer is that this is not our field of interest and secondly we could not provide this kind of support AND all the extraneous hardware for R 400 000 pa. Managing ICT staff, their careers and aspirations, is an extra overhead, gladly outsourced to an IT company. Another view is that different or better hardware could drive down this support. The simple number of tasks that are related to laptop hardware and warranty failures are not the significant part of the cost of maintaining the support structure. Everything listed above needs constant and professional oversight and management. So even much better hardware would not significantly alter the cost of the maintenance of the whole of IT support for each boy at the school.

3) Additional Support fee for non-recommended hardware:

## Machines bought 2016 and beyond

Policy is that all parents buy one of the prescribed machines from the awarded supplier and therefore there are no additional costs.

We trust that the above explanation serves to explain, highlight and support the fees charged by the school to support and maintain your son's IT infrastructure for the next 4 and a half years. Should you have any queries, please contact laptops@bishops.org.za.

Laptop Committee